Thermochimica Acta, 225 (1993) 311–312
Elsevier Science Publishers B.V., Amsterdam

VOLUME CONTENTS

(*Abstracted/Indexed in: Curr. Contents: Phys., Chem. Earth Sci.; Eng., Technol. Appl. Sci., Chem. Abstr., PASCAL/CNRS*)

Vol. 225, No. 1

REGULAR PAPERS

Theoretical

Computed gas-phase thermodynamics of the N_2–O_2 complexes
F. Uhlík, Z. Slanina, W.B. De Almeida and A. Hinchliffe (Manchester, UK) 1

Thermodynamics and Calorimetry

Enthalpies of transfer of selected ions from water to water–propan-2-ol mixtures. Some quantum chemical aspects of the ionic solvation
S. Taniewska-Osińska, B. Nowicka, A. Pietrzak, S. Romanowski and T.M. Pietrzak (Łódź, Poland) 9

On the estimation of thermodynamic excess properties of binary solid solutions
W.J.M. van der Kemp, J.G. Blok, P.R. van der Linde, H.A.J. Oonk, A. Schuijff and M.L. Verdonk, (Utrecht, The Netherlands) 17

Excess molar enthalpies of mixing of benzene with pyridine bases
T. Kasprzycka-Guttman and H. Wilczura (Warsaw, Poland) 31

Molar heat capacities of some derivatives of uracil and theophylline
T. Gondová, J. Gonda and P. Králik (Košice, Slovak Republic) 37

Thermal Analysis

The thermal investigation of some normal propylammonium salts in the solid state
S. Mitra (Calcutta, India) and H.P. Singh (Imphal, India) 43

The thermal decomposition of aminotetrazoles. Part 2. 1-Methyl-5-aminotetrazole and 1,5-diaminotetrazole
S.V. Levchik, A.I. Balabanovich, O.A. Ivashkevich, A.I. Lesnikovich, P.N. Gaponik (Minsk, Belarus) and L. Costa (Turin, Italy) 53

Thermogravimetric studies of poly(oxymethylene-co-dimethylsiloxane) copolymers
M. Rodríguez-Baeza, M. Zapata, G. Cárdenas T. (Concepción, Chile) and L.H. Tagle D. (Santiago, Chile) 67

Thermal analysis of conducting polymers. Part 3. Isothermal thermogravimetry of doped and pristine polyaniline
H.S.O. Chan, L.M. Gan, T.S.A. Hor, S.H. Seow and L.H. Zhang (Kent Ridge, Singapore) . 75

A topological index and its applications. Part 3. Estimations of the enthalpies of formation of mixed halogen-substituted methanes, silanes and boron mixed halides
L.-F. Li and X.-Z. You (Nanjing, People's Republic of China) 85

Polymorphism and thermal behaviour of 3-*para*-toluyl-1,2,2-trimethyl cyclopentane carboxylic acid
A. Terol, A. Bouassab, B. Pauvert, P. Chevallet and G. Cassanas (Montpellier Cedex, France) 97

Other Topics

Infrared spectroscopy and thermodynamics of indium tri-iodide vapour species
S. Dickinson (Dorchester, Dorset, UK) and R.J.M. Konings (Petten, The Netherlands) 111

The exchange of oxygen isotopes in high-temperature superconductors
E. Kemnitz, D.-H. Menz, C. Stöcker and T. Olesch (Berlin, Germany) 119

NOTE

Thermodynamics and Calorimetry
The thermodynamics of sublimation and vaporization of some volatile β-diketonates complexes with the elements of HTSC phases
S.V. Sysoev, A.N. Golubenko, L.D. Nikulina and T.N. Martynova (Novosibirsk, Russian Federation) 137

Book Review 141

Vol. 225, No. 2

Special Issue: Safety Techniques

Preface xi

Determination of chemical kinetics by DSC measurements. Part 1. Theoretical foundations
P. Hugo, S. Wagner, and T. Gnewikow (Berlin, Germany) 143
Determination of chemical kinetics by DSC measurements. Part 2. Experimental results
S. Wagner, P. Hugo, and T. Gnewikow (Berlin, Germany) 153
The calculation of adiabatic thermal explosion from isothermal DSC measurements
Th. Grewer (Frankfurt, Germany) 165
A spreadsheet kinetic model and its use to compare ARC and Dewar storage test data for two exothermic decompositions
P.B. DeGroot (Corpus Christi, TX, USA) and K.-J. Niemitz (Frankfurt, Germany) 177
Safety assessment for polyetherol production using reaction kinetic data
H.W. Bosch and V. Schliephake (Ludwigshafen, Germany) 189
Decomposition of aromatic diazonium compounds
R. Ullrich and Th. Grewer (Frankfurt, Germany) 201
Hydrogen peroxide decomposition in the presence of organic material. A case study
O. Klais (Frankfurt, Germany) 213
Secondary reactions and detonation hazards in the production of adipic acid
J.L. Gustin (Decines, France) and P. Vidal (Poitiers, France) 223
Gas evolution and pressure increase during undesirable chemical reactions. A survey of the experimental methods to detect gas evolution and pressure increase
B. Hentschel (Marl, Germany) and V. Schliephake (Ludwigshafen, Germany) 239
The theoretical and experimental investigation of a catalyst-controlled semi-continuous process. An alternative approach
K.-J. Niemitz (Frankfurt, Germany) 251
Heat flow reaction calorimetry under reflux conditions
R. Nomen, J. Sempere and P. Lerena (Barcelona, Spain) 263
Determination of thermal and kinetic data of the diazotisation of 6-bromo-2,4-dinitroaniline with nitrosylsulphuric acid
U. Wörsdörfer (Frankfurt, Germany) 277
Exothermic secondary reactions
Th. Grewer (Frankfurt, Germany) and R.L. Rogers (Manchester, UK) 289

Author Index 303

Subject Index 305

Volume Contents 311